	Heat Required for		Heat Available Products Combust	
	Gas	Air	Gas Checker	*Cl Y**
For gas: 228.5X2	457	1093.2	1071	66 1C
For air: 546.6X2			23	12 .9
Available in products of combustion . .	155	0.2	697.5	9 .0
Per cent of total required	29.48	70.52		1 12
Heat available required for the gas				₡
Heat available required for the air				8€
Volume of products of combustion required for gas checker, 697. 5 -			65.13	
Volume of products of combustion required for air checker, 1668 . 5				
Total per cent waste gases			193	
Correction to make 200 per			6	
Corrected per cent values			67.00	
Reducing these to a 100 per cent basis	228.5	546.6	33.50	
Calories per cubic meter of gas burned	1.00	1.87	359	
Volumes per cubic meter of gas			0.9*	

*2.68 volumesX0.335 and 2.68X0.665.

The surplus heat over that required for the preheating o gas and air will be

For the gas checker: 359-228.5 = 130.5 calories
For the air checker: 861 — 546.6=314.4 calories

This surplus supplies the heat lost by radiation, condu< and convection from the checker or regenerator chamber
should these losses be not sufficient to absorb this amount of
the final temperature of the products of combustion leaving checkers will automatically increase until the heat carried into the furnace by the air and gas plus these losses equals